



FIVE-YEAR REVIEW REPORT

**Second Five-Year Review Report
For
Prestolite Battery Site
Vincennes, Knox County, Indiana**

September 2006

**PREPARED BY:
Region 5
United States Environmental Protection Agency
Chicago, IL**

Approved by:

Date:

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9-25-06

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List of Acronyms

AOC	Administrative Order by Consent
ARARs	Applicable or Relevant and Appropriate Requirements
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOJ	Department of Justice
EPA	United States Environmental Protection Agency
ERA	Expedited Response Action
GIS	Geographical Information System
IC	Institutional Control
IDEM	Indiana Department of Environmental Management
MCLs	Maximum Contaminant Levels
MW	Monitoring Well
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene
PRP	Potentially Responsible Party
RA	Remedial Action
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act of 1986
TBCs	To be Considereds
TCE	Trichloroethene

UU/UE	Unlimited Use and Unrestricted Exposure
VOCs	Volatile Organic Compounds

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Executive Summary

The remedy for the Presolite Battery Site located in Knox County, near Vincennes, Indiana performed under the 1992 Administrative Order on Consent (AOC) included removal of lead-contaminated soil and debris (on-site and off-site) and decontamination and/or removal of lead-contaminated portions of the on-site buildings including surfaces and sewers. In addition, the remedy under the 1994 Record of Decision (ROD) included monitored natural attenuation of groundwater for volatiles and metal contaminants and also sampling of sediments and surface waters for volatile and metal contaminants and institutional controls. The site achieved remedial construction completion with completion of the Preliminary Closeout Report on May 22, 1997. The trigger for this second five-year review was the signature date of the first five-year review, which was September 27, 2001.

The assessment of this five-year review found that the remedy was constructed in substantial accordance with the requirements of the ROD and the AOC, and that it remains protective of human health in the short term. The on-site threats posed by lead contaminated soils and buildings have been addressed and groundwater cleanup goals are expected to be achieved through monitored natural attenuation.

A protectiveness determination of the remedy cannot be made at this time until further information is obtained. Further information will be obtained by taking the following actions: 1) Perform vapor intrusion modeling and indoor air sampling or soil gas sampling for two residences north of the site; and 2) Assess second round of lead soil sampling at the adjacent auto garage property and perform any necessary soil remediation; and 3) Evaluate the current groundwater cleanup goals for TCE and PCE for protectiveness after U.S. EPA Headquarters completes its risk assessment of these chemicals; and 4) Develop an IC Plan to implement ICs, as necessary, based on the reassessment of the soil cleanup and the results of lead sampling at the auto garage property. The IC Plan will also be developed with regard to parcels impacted by site groundwater.

It is expected that these actions will take approximately one year to complete, at which time a protectiveness statement will be made.

Five-Year Review Summary Form

SITE IDENTIFICATION

Site name (from WasteLAN): Prestolite Battery Site

EPA ID (from WasteLAN): IND006377048

Region: 5

State: IN

City/County: Vincennes/Knox County

SITE STATUS

NPL status: c Final

Remediation status: Construction Complete – O & M On-going

Multiple OUs?* NO

Construction completion date: 5/22/1997

Has site been put into reuse? YES

REVIEW STATUS

Lead agency: U.S. EPA

Author name: Darryl Owens

Author title: Remedial Project Manager

Author affiliation: Region 5, U.S. EPA

Review period:** 4 / 1 / 2006 to 8 / 15 / 2006

Date(s) of site inspection: June 14, June 15, 2006

Type of review: Post-SARA Statutory

Review number: Two

xx ☐ Previous Five-Year Review Report

Triggering action date (from WasteLAN 9/27/2001)

Due date (five years after triggering action date): 9/27/2006

* ["OU" refers to operable unit.] ** [Review period

Five Year Review Summary Form, contd.

Issues:

- 1.) The possibility of vapor intrusion from TCE/PCE in the groundwater into two residences north of the site needs to be investigated.
- 2.) The extent of lead contamination in soil at the auto garage property north of the site needs to be investigated and any necessary response actions implemented. After any necessary remedial actions for that property have been defined, institutional controls (ICs) will be implemented, as appropriate.
- 3.) The adequacy of the Record of Decision groundwater cleanup goals for TCE and PCE needs to be evaluated.
- 4.) The barrels of purge water left on site from the previous sampling event need to be removed.
- 5.) The soil cleanup level, using the current model for lead contamination, should be re-assessed.
- 6.) If the reassessment of the soil cleanup level shows that the cleanup is inconsistent with residential development, a number of follow-up actions will be necessary: (A) Prepare an IC plan to establish any necessary proprietary controls, (B) determine which of the numerous easements to which the site is subject might affect the efficacy of environmental restrictions, and (C) evaluate other issues which may be raised by the title commitment as to the effectiveness of the environmental controls, and (D) expand the IC study to include other parcels impacted by site-related soil contamination.
- 7.) EPA will prepare an IC plan to address groundwater contamination off the Prestolite property.

Recommendations and Follow-Up Actions:

- 1.) Vapor intrusion modeling will be performed to determine the potential of vapor intrusion along with either indoor air sampling of the two residences or soil gas sampling beneath the residences.
- 2.) The results of the second round of lead soil sampling on the auto garage property which took place in June 2006 will be evaluated and any necessary remediation will be performed.
- 3.) A review of the protectiveness of the current groundwater cleanup goals for TCE and PCE will be performed when U.S. EPA Headquarters completes the TCE and PCE risk assessments.
- 4.) The barrels of purge water will be removed with the purge water from the June 2006 groundwater sampling event.
- 5.) Review the protectiveness of the soil cleanup using the current lead risk assessment model.
- 6.) EPA will prepare an IC plan if the re-assessment of the soil cleanup level shows that the cleanup is incompatible with residential use.
- 7.) EPA will prepare an IC plan to address groundwater contamination off the Prestolite property.

Protectiveness Statement:

A protectiveness determination of the remedy cannot be made at this time until further information is obtained. Further information will be obtained by taking the following actions:

- 1.) Perform vapor intrusion modeling and indoor air sampling or soil gas sampling for two residences north of the site;
- 2.) Complete review of second round of lead soil sampling at the adjacent auto garage property and perform any necessary soil remediation; and
- 3.) Review the protectiveness of current groundwater cleanup goals for TCE and PCE after EPA Headquarters completes the TCE and PCE risk assessments.
- 4.) Review the protectiveness of the soil cleanup using the current lead risk assessment model.
- 5.) Develop an IC Plan to implement ICs, as necessary, based on the reassessment of the soil cleanup and the results of lead sampling at the auto garage property. An IC Plan will also be developed with regard to parcels impacted by site groundwater.

It is expected that these actions will take approximately one year to complete, at which time a protectiveness statement will be made.

Other Comments: None

**U.S. Environmental Protection Agency
Region 5
Second Five Year Review
Prestolite Battery Site
Vincennes, Indiana**

I. Introduction

EPA Region 5 has conducted a five-year review of the remedial actions implemented at the Prestolite Battery Superfund site in Vincennes, Indiana. This review was conducted from April to August 2006. This report documents the results of the review. The purpose of five-year reviews is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of the review are documented in five-year review reports. In addition, five-year review reports *identify deficiencies found during the review, if any, and identify recommendations to address them.*

This review is required by statute. EPA must implement five-year reviews consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). CERCLA 121(c), as amended, states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented.

The NCP part 300.430(f)(4)(ii) of the Code of Federal Regulations (CFR) states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.

This is the second five-year review for this site. The triggering action for this review is the first five-year review which occurred on September 27, 2001. Since there are hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, and therefore, this five-year review is required.

II. Site Chronology

Table 1 lists the chronology of events for the Prestolite Battery site.

Table 1: Chronology of Site Events

Date	Event
1982	Initial Discovery of Problem
1989	NPL Listing
11/93	Expedited Response Action Start
10/94	Expedited Response Action Complete
8/94	RI/FS Complete
8/94	ROD Signature
5/97	Remedial Action Complete
7/98	Complete monitoring well installation and begin groundwater monitoring
9/01	First Five-Year Review
1998-2005	Annual Groundwater Monitoring

III. Background

A. Physical Characteristics

The Prestolite Battery site is an inactive lead-acid battery manufacturing facility located in Knox County, Indiana (see Figure 1). The facility occupies approximately 18 acres on U.S. Highway 41 northwest of the City of Vincennes. The land use immediately surrounding the Prestolite site is residential and commercial. Five residences are situated on North Second Street immediately north of the site, and two residences are located on North Sixth Street immediately south of the site. The site is bordered on the west by an Indiana State Highway garage, and to the east of the site is a local inn. A 5-acre pond (Northwest Pond) and associated wetland complex and an auto salvage yard lie immediately northwest of the site. The city limits of Vincennes lie approximately 500 feet to the west of the site.

Land and Resource Use

The historic use of the site was for the manufacture of lead-acid batteries. The Prestolite Battery facility operated from 1945 to 1985. The current use of the site is commercial and since the completion of cleanup activities, extensive redevelopment of the site has occurred.

The Prestolite Battery site overlies Illinoisan glacial outwash and alluvial floodplain deposits. These unconsolidated sediments have filled a deep north-trending, pre-glacial trough. The thickness of these sediments is highly variable, but may be up to 100 feet in the area. Bedrock underlying the unconsolidated sediments consists of the upper Pennsylvanian Dicksburg Hills Sandstone member of the Pakota Formation. There are five unconsolidated units present under the site. From ground surface to an average depth of 10 feet, a brown silty clay is present. The second unit is a fine to medium sand and fine gravel which constitutes the shallow groundwater aquifer. This unit has an average thickness of 12 feet. Groundwater contamination at the site is limited to this shallow aquifer and has not contaminated the three deeper aquifers.

The Prestolite Battery site is located in the floodplain of the Wabash River and is described as a low lying alluvial plain. Topography at the site is relatively flat and is approximately 25 feet higher in elevation than the Wabash River. Several other water bodies are present in the area. These include the North Drainage Ditch, Kelso Creek, and the Northwest Pond. The North Drainage Ditch and Kelso Creek are located approximately 250 feet and 500 feet west of the site, respectively. The Northwest Pond is a shallow surface water body and wetland area downgradient of the site. It is located approximately 300 feet northwest of the site.

History of Contamination

In 1945, the Autolite Battery Corporation established the facility for the manufacture of lead-acid batteries, primarily for use in cars and trucks. In 1955, the site was purchased by the Eltra Corporation, under the name Prestolite Battery. Allied Chemical Company (forerunner to Allied-Signal, Inc. (Allied)) acquired the Eltra Corporation in 1979. Allied announced the decision to cease production at the plant on March 6, 1985, and the facility has been inactive since closure in May 1985.

In the course of plant operations, manufacturing process wastes and wastewater became laden with lead, lead oxides, lead sulfates, and sulfuric acid. These lead-containing sludges and wastewaters were discharged to an on-site sewer system. Over time, these sewer lines became plugged with lead sludges, and as a result of leaks and sewer line back-ups, the soils around some of these sewers and associated sumps were contaminated. Lead dust was also released from the plant's ventilation system, contaminating surface soils in the vicinity. Accidental spills of process materials also contributed to the lead-contamination of on-site soils. Elevated concentrations of polychlorinated biphenyls (PCBs) were also present on-site in soils around a

transformer pad near the northwest corner of the main building.

Prior to 1978, wastewaters were sent through the on-site sewer system directly to the Vincennes Publicly Owned Treatment Works (POTW) via the city sanitary sewer system. Beginning in 1978, wastewaters were subject to pH treatment on-site followed by placement into a wastewater sedimentation lagoon prior to discharge to the POTW. An analysis of the lagoon sediment indicated high levels of lead, iron, aluminum, arsenic, barium, and calcium. Based on file information, other chemicals potentially used at the site included trichloroethane, methylene chloride, paint thinner, epoxy resin, refined coal tar, and a lubricant containing trichloroethylene.

Initial Response

Beginning in 1982, Allied commenced investigations to assess the degree of contamination on and off-site. Pursuant to these investigations, more than 7,000 cubic yards of lead and PCB contaminated soils were reportedly removed from both on and off-site areas. Other activities conducted by Allied included closure of the RCRA-regulated wastewater lagoon, sewer excavations, cleaning of the building roof and interior, and community blood sampling.

The Prestolite Battery site was first proposed for the National Priorities List (NPL) on September 18, 1985, based on a Hazard Ranking System (HRS) score of 46.67. The scoring was based on the potential for lead contamination to migrate to underlying groundwater, as well as the presence of PCBs in soils on-site. Because Allied's investigations showed no lead contamination of the groundwater, it requested that EPA reconsider the proposal to include the site on the NPL. Also during this time, Allied was implementing a RCRA closure plan for the on-site lagoon. The closure activities raised questions concerning whether RCRA or CERCLA authority should be used to address on-site contamination problems. In June 1988, the site was repropoed for the NPL under a RCRA status category that covers sites where RCRA corrective actions may not apply to all contamination at the site. The site was listed on the NPL on October 4, 1989.

Enforcement activities began in July 1987 when, pursuant to Section 104 (e) of CERCLA, EPA requested that Allied submit all information regarding site contamination and removal actions conducted at the site for EPA review. Based on EPA clean-up precedents, and the potential for use of the Prestolite Battery site for other than industrial purposes, EPA determined the following: 1) a cleanup level of 500 ppm lead in soil could be appropriate for the site; and 2) further investigation would be required. In January 1988, EPA provided Allied with a draft Administrative Order by Consent (AOC) and a Statement of Work (SOW) for conducting a Remedial Investigation/Feasibility Study (RI/FS) at the site. In February 1988, EPA and Allied began negotiations regarding the AOC for the implementation of the SOW. These negotiations were unilaterally ended by Allied on September 30, 1988. As a result, EPA planned to use funds to conduct a Superfund-financed RI/FS under the Superfund program.

Subsequent to ending negotiations, Allied supplied EPA with a work plan, dated October 1,

1988, and during the period of October 1988 through February 1990, conducted a number of investigative sampling, soil excavation, and verification sampling activities. With the exception of a May 1989 removal of on-site soil piles (in response to an AOC), none of the work completed by Allied after October 1988 occurred under statutorily required EPA oversight. EPA took the position that Allied's activities at the site were in violation of CERCLA, Section 122(e)(6), and that these activities interfered with the EPA's ability to conduct an RI/FS. In August 1989, EPA referred the matter to the Department of Justice (DOJ), requesting the filing of a civil action to obtain an injunction ordering Allied to stop all present and future work so that the EPA could proceed with an orderly and timely RI/FS. In January 1990, the DOJ filed a two-count suit in the United States District Court for the Southern District of Indiana to address the alleged CERCLA 122(e)(6) violation and to recover costs for the RI/FS.

In April 1990, Allied submitted its final report to EPA. EPA's RI/FS work plan was final in October 1990. The RI field work was postponed until the court addressed the request for the injunction from the DOJ. In March 1991, a stipulation and order were agreed to by EPA and Allied, which enjoined Allied from undertaking certain activities at the site, as defined in the order, until EPA completed its RI/FS.

Phase I of EPA's RI was conducted from July through October 1991. During this investigation, the extent of lead contamination in soil was determined both on and off-site. The investigation also identified site-related volatile organic (VOC) contamination in the groundwater, and lead contamination in the on-site sewer system and in the Northwest Pond/wetland complex. Based on the results of the Phase I RI, the EPA conducted a Phase II RI from December 1992 through March 1993 to fully define and characterize the extent of contamination in groundwater, the city sewer system, and in the Northwest Pond/wetland complex.

Based on the Phase I RI results, the EPA resolved to pursue cleanup of the lead contamination of both on-site and off-site soils as a removal action. As a result, on September 25, 1992, EPA entered into an AOC with Allied, requiring Allied to conduct an Expedited Response Action (ERA) to remove all lead-contaminated soil and debris, on-site and off-site, and decontaminate or remove all lead-contaminated portions of the on-site buildings, including surfaces and sewers. As stipulated by the AOC, lead-contaminated soils required remediation to a level below 530 ppm. From November 1993 through May 1994, Allied conducted Phase I of the ERA, under EPA oversight. During this phase, all of the on-site lead contamination was remediated, as well as limited off-site areas. Allied also addressed the city sewer system contamination defined in the EPA's Phase II RI. The Phase II ERA, which addresses the remaining off-site areas, was completed in October 1994.

Subsequent to the Phase II RI results, an FS was conducted by the EPA to address permanent remedies for the site-related groundwater contamination and impacts to the Northwest Pond and Kelso Creek. A Record of Decision was issued August 23, 1994.

Basis for Taking Action

Surface soil sampling indicated that on and off-site soils were contaminated with inorganic chemicals, primarily lead. Lead and other inorganics were also found in on-site sewers and manholes. A human health evaluation found that there was a non-cancer related human health risk associated with exposure to lead in these media. A cleanup level of 530 parts per million was determined to be protective of human health.

Groundwater was also found to be contaminated both on and off-site. The primary contaminants in the groundwater were the volatile contaminants tetrachloroethene (PCE), trichlorethene (TCE), as well as, the metals antimony and beryllium. Cancer risks exceeding U. S. EPA's acceptable carcinogenic (cancer causing) risk range were found for both off-site residents and potential future on-site residents if the groundwater were used for drinking water purposes. Non-cancer risks were also determined to exceed U.S. EPA's hazard indices for both off-site residents and potential future on-site residents if groundwater were used for drinking.

IV. Remedial Actions

Remedy Selection--Soil

As previously discussed, EPA entered into an Administrative Order by Consent (AOC) with Allied Signal in September 1992 to conduct an Expedited Response Action (ERA). Under the terms of this AOC, Allied was to remove all lead-contaminated soil and debris, on-site and off-site, and decontaminate or remove all lead-contaminated portions of the on-site buildings, including surfaces and sewers.

Redevelopment

Rex Alton, owner of Rex Alton Companies, bought the former Prestolite property for \$250,000 in 1986 from Allied Signal. In 1996, Mr. Alton entered into a Prospective Purchaser Agreement (PPA) with U.S. EPA to allow the re-development of the site. A 134,000-square-foot Lowe's store opened on the former Superfund site in 2002, providing residents with the area's first home-improvement warehouse. The Lowe's store cost about \$6 million to build. In addition, the site now hosts two restaurants, Denny's and Grandy's. Several banks and a Huck's convenience store with a gas station have been constructed on property adjacent to the site. All but three acres of the site have been redeveloped.

Remedy Selection--Groundwater

Subsequent to the issuance of the AOC, a Record of Decision (ROD) was signed in August 1994 for ground water contamination at the site. The main components of the ROD were:

- Long term groundwater monitoring of the shallow and intermediate aquifers for volatile organic compounds and metals;
- Long term monitoring of surface water and sediments for volatile organic compounds and metals at the Northwest Pond and Kelso Creek;
- Institutional Controls: one unused well will be abandoned and one active residential well was to be abandoned and the residence connected to the city water supply; and
- Natural Attenuation of the shallow groundwater aquifer.

Remedy Implementation

The Expedited Response Action (ERA) was conducted in two phases. Phase I was the major remediation activity and was conducted from November 1993 through April 1994 and included the following activities:

- On-site soil excavation- Approximately 9600 cubic yards of lead-contaminated soil was excavated as part of this activity. About 2300 cubic yards of the contaminated soil required stabilization prior to disposal in an off-site landfill. The remaining 7300 cubic yards of contaminated soil which did not require stabilization was also disposed of in the same off-site landfill.
- Off-site soil excavation and gutter cleaning- Excavation occurred at one residence, a ditch and the North Sixth Street right of way. Approximately 1350 cubic yards of lead contaminated soils were excavated from these areas and disposed of in the off-site landfill. Additional sampling was conducted at this time and contamination was identified on several properties. Remediation of these properties was postponed in order to obtain access and this work became Phase II of the ERA.
- Boiler and main building decontamination- Decontamination activities included the removal of asbestos materials, the removal of lead dust on interior surfaces by power washing, as well as the removal of roof gutters, roof sediment and duct work from the main building.
- Sewer Cleaning/Removal- During the Phase I ERA, both on-site and off-site sewers were remediated. Process sewers beneath the main building floor and the sanitary sewer on the south end of the property were excavated. Three sewer lines running from the pH house to the site lagoon were cleaned and left in place. In addition, the City sanitary sewer along North Sixth Street was cleaned by a City contractor and approximately 50 cubic yards of lead-contaminated sewer sediments were provided to Allied for disposal.

- Lagoon Decontamination- After the discharge of all site waste water from the lagoon to the Vincennes Publicly Owned Treatment Works (POTW), the lagoon was decontaminated.

Phase II ERA activities were conducted for off-site areas in September and October 1994. The ERA work was phased due to access issues and the need to remove extensive amounts of rubbish and vegetation between several residences and active and abandoned rail lines. The Phase II removal of the remaining off-site contaminated soils include several residential areas northwest and southeast of the site, the active and abandoned railroad embankments and a portion of the east bank of the Northwest Pond. A total of 2800 cubic yards of contaminated soils were excavated and disposed of in the off-site landfill.

The groundwater remedy in the 1994 ROD is a natural attenuation remedy. That remedy is being implemented pursuant to a 1997 Consent Decree with Allied Signal, United States v. Allied Signal, Inc., Civ. Action No. TH 90-7-C (S. Dist. Ind. 1997). Under the term of the ROD and the Consent Decree, groundwater monitoring is being conducted to determine whether groundwater concentrations decrease over time as anticipated. Groundwater monitoring began in October 1998. At that time, additional monitoring wells were installed on-site. In addition, the proposed institutional controls were implemented by abandoning two residential wells and reconnecting the well which was still in use to the municipal water system. While well abandonment was described in the ROD as being the implementation of institutional controls, EPA would not now consider such a physical remedial action to be the implementation of institutional controls, but the execution of engineering controls. Several monitoring wells on the site which are no longer needed were also abandoned. Also, due to site construction activities, monitoring wells MW-1, MW-2, MW-3, MW-8, MW-10, MW-13, and MW-14 could not be located and appropriately abandoned.

Systems Operation/Operation and Maintenance

Since there is not an active groundwater pump and treat system at the site, system operations are minimal. Operations consist of groundwater monitoring and periodic maintenance of the monitoring wells.

In 1999, a wholly owned subsidiary of Allied Signal merged with Honeywell; the resulting entity, known as Honeywell, became responsible for Allied Signal's obligations under the Consent Decree.

V. Progress Since the Last Five-Year Review

The following issues were identified in the first five-year review:

- Presence Of Lead Contaminated Soil Discovered During Redevelopment Activities-

The Phase I and Phase II Property Assessments performed for the site for the future sale of the property showed several soil hotspots remained with lead concentrations exceeding the site cleanup level. The site developer excavated these hotspots and stockpiled the soils on site. In 2002, approximately 400 tons of contaminated soil was transported off site for disposal in a landfill. Subsequently, in 2004, an additional 64 tons of contaminated soil were transported off site for disposal in a landfill. This soil cleanup action is now complete.

- Elevated Levels Of Lead In Surface Water And Sediment Samples In The Northwest Pond-

Based on these elevated levels of lead, U.S. EPA and the IDEM ("the Agencies") requested that Honeywell sample for lead and other metals in fish and crayfish in the Northwest Pond. This sampling was conducted July 29-August 1, 2002. Eight largemouth bass were caught and analyzed. Largemouth bass were selected as the target species because they represent the top of the food chain and, as such, should exhibit any tendency to bioaccumulate contaminants in the pond. The bass that were caught were two to three years old and their sizes and body conditions were typical of fish of that age. The results of the sampling found that none of the maximum concentrations of metals in fish filets or whole body samples exceeded the project action levels. Comparison of metals concentrations in fish to the sediment concentrations revealed that the fish concentrations are several orders of magnitude less than sediment concentrations, indicating that metals in the surface water and sediments are not bioaccumulating in the aquatic food chains.

Hazard quotient food modeling was also performed to evaluate potential contaminant effects to great blue heron and raccoons from ingesting fish and found that there were not unacceptable risks to these species from ingesting fish. Finally, a screening level assessment was performed to assess whether children and adults would experience unacceptable health risks from ingesting fish from the pond. The assessment concluded that there would not be unacceptable carcinogenic risks or other health effects.

As part of the July/August 2002 sampling event, the Agencies had also requested that crayfish be sampled. However, no crayfish were caught at that time. The Agencies requested that another attempt be made to capture crayfish and made some suggestions to Honeywell regarding bait, sampling depths, locations etc. Utilizing these suggestions, in June 2004 a second attempt was made to capture crayfish but none were found. After the second attempt at capturing crayfish, the Agencies concluded that aquatic crayfish populations were not high enough for sampling and no further sampling attempts were required.

The Agencies consider the fish and crayfish sampling to be complete and no unacceptable risks were found to fish or to animals and humans that might ingest the fish.

- Lead Contamination On The Auto Garage Property-

U.S. EPA informed Honeywell that it had determined that the predominant source of lead found on the auto garage property during the 1992 Remedial Investigation had come from the operations at the Prestolite Battery site and requested that soil sampling be performed to determine whether lead contamination still existed on the property. In response to U.S. EPA's request, Honeywell collected surface soil samples from 10 sampling grid locations at the auto garage in July 2005. Two samples were collected from each location at depths of 0-2 inches below ground and 2-6 inches below ground. Sampling results showed that at 6 of the 10 sample locations, the lead concentrations exceeded the Prestolite Battery site soil lead cleanup level of 530 parts per million (ppm). Three of the four sample locations located closest to the Prestolite Battery site had the highest concentrations of lead. Lead concentrations decreased at sample location distances farther from the Prestolite Battery site.

Based on these sampling results, Honeywell requested that it be allowed to perform additional sampling to better determine the lateral extent and depth of the lead soil contamination. This sampling divided the site into eight individual sections with a composite sample consisting of five locations taken from each section. This sampling plan was performed in accordance with procedures contained in U. S. EPA's *Superfund Lead Contaminated Residential sites Handbook* (August 1993). Each composite sample was taken at 0-6 inches below ground and then at 3 other deeper intervals. This second round of sampling on the auto garage property occurred June 14 and June 15, 2006.

- Unused Monitoring Wells On Site Could Not Be Located In Order To Be Abandoned-

Due to construction activities, several unused monitoring wells on site could not be located in order to be abandoned. In accordance with IDEM's request, Honeywell notified the Indiana Department of Natural Resources about the monitoring wells which could not be located.

VI. Five Year Review Process

Administrative Components

The Prestolite Battery site five-year review was prepared by Darryl Owens, U.S. EPA Remedial Project Manager for the site. Thomas Burck, Site Project Manager with the Indiana Department of Environmental Management (IDEM) also assisted in the review. The five-year review consisted of a review of relevant documents and a site visit.

Community Involvement

An ad was placed in the Vincennes Sun Commercial Newspaper in May 2006 announcing that the five-year review was being conducted. A copy of the ad is included as Attachment 4 to this report. The completed report will be available in the information repository. Notice of its completion will be placed in the local newspaper and local contacts will be notified by letter.

Document Review

This five-year review consisted of a review of relevant documents including monitoring data and ecological sampling results. See Attachment 2 for the documents reviewed.

Data Review

Groundwater

Groundwater monitoring is being performed to determine if the groundwater contamination is attenuating, or decreasing, through the use of natural processes. Groundwater results from October 1998 through September 2005 are available for review. Groundwater sampling was performed on a semi-annual basis for 4 on-site monitoring wells (MW-1R, MW-2R, MW-4S and MW-4I) and 5 off-site down-gradient wells (MW-18S, MW-18I, MW-19, MW-20S and MW-22S). See Figure 2 for groundwater monitoring well locations.

In 2002 Honeywell petitioned the Agencies to reduce the groundwater monitoring at the site. The signed Consent Decree permitted the potentially responsible parties to request the cessation of groundwater monitoring in individual monitoring wells that had six consecutive sampling events where constituents measured below the Safe Drinking Water Act Maximum Contaminant Levels (MCLs) for metals and volatile organic compounds (VOCs). In June 2004, the Agencies gave approval to cease sampling at monitoring wells MW-2R, MW-4S, MW 4-I, MW-18BR and MW-22S. The Consent Decree also permitted the responsible parties to request after three years that groundwater sampling be reduced from semiannual to annual. Based on the Agencies' review of the trend analysis of contaminants, the Agencies also approved this request.

Comparing the sampling results from October 1998 to September 2005 to the sampling results in 1993 from the site Remedial Investigation, the following observations are made:

- There seems to be a downward trend in PCE contamination. There are 3 downgradient monitoring wells currently being monitored for PCE. The off-site monitoring well with the highest PCE concentration in 1993 (Monitoring Well 20-S) of 150 ug/l (parts per billion) has had decreasing concentrations and had a concentration of 16 ug/l in the September 2005 sampling event. Monitoring Well MW 18-S has also decreased from 33

ug/l in 1993 to 6 ug/l in September 2005. Monitoring Well MW 19-S has had a relatively constant concentration of about 20 ug/l. The concentrations in all of the monitoring wells are still above the MCL of 5 ug/l.

- The highest concentrations of TCE are found in monitoring wells MW19-S and MW20-S. The concentrations of TCE in MW 19-S have increased from 2 ug/l in 1993 to 10 ug/l in September 2005. The concentrations of TCE in MW 20-S, while fluctuating slightly, have remained approximately the same with a concentration of 13 ug/l in 1993 and 12 ug/l in September 2005. These concentrations remain above the MCL for TCE of 5 ug/l.
- Beryllium contamination does not appear to be a problem any longer. The highest 1993 sampling results for beryllium were about 2.5 ug/l while the recent sampling results generally show about 0.2 ug/l. The downgradient concentrations are less than the concentrations in the upgradient monitoring well MW 1-R. The MCL for beryllium is 4 ug/l.
- Antimony was detected in one well (MW-4I) during the May 2000 sampling event at a concentration of 5 ug/l. This sample did have a laboratory qualifier indicating the antimony was present but with some uncertainty about the accuracy of the exact concentration. Antimony has not been detected in downgradient monitoring wells since that time and does not appear to be a problem any longer. The MCL for antimony is 6 µg/L.
- Lead was detected in monitoring well MW 20-S in 2002 at a concentration of 31 ug/l. Lead has not been detected in MW 20-S since that time. Prior to 2002, lead had only been detected once in 1993 at a concentration of 1.4 ug/l. The U.S. EPA Action Level for lead is 15 ug/l.

As can be seen from the above discussion, PCE appears to be naturally attenuating. Antimony has not been detected in over five years and beryllium has been found in very low concentrations similar to the levels found in the upgradient well to the site. TCE has been the most persistent contaminant, increasing in one monitoring well and remaining the same in another monitoring well.

Surface Water and Sediment Sampling

Surface and sediment sampling is also being conducted on an annual basis in several off-site surface water bodies, which are Kelso Creek and the Northwest Pond. As discussed above, exceedences of State and Federal standards for metals in sediment and surface water samples in the Northwest Pond prompted the Agencies to request sampling of fish and crayfish. The fish sampling was conducted in July 2002 and no unacceptable risks were found for fish or for humans who would consume them. Crayfish could not be captured for sampling after two separate attempts. Sediment and surface water samples continue to be collected in the Northwest

Pond. While lead and several other metals concentrations in sediment and surface water continue to be at similar levels prior to the fish sampling, the Agencies do not see a need to do further fish sampling because of the lack of bioaccumulation of metals shown in the prior fish sampling event. Sediment and surface water sampling continue to be performed in Kelso Creek. Sediment and surface water concentrations in Kelso Creek remain below State and Federal water quality and sediment standards.

Soil Sampling

Soil sampling was performed on the auto garage property adjacent to the Prestolite Battery Site. The details were described above in Section V.

Institutional Controls

Institutional controls (ICs) are non-engineered instruments such as administrative and legal controls that help to minimize the potential for exposure to contamination and protect the integrity of the remedy. Institutional controls are required to assure long-term protectiveness for any areas which do not allow for unlimited use or unrestricted exposure (UU/UE). Relative to the site, ICs may not be required with regard to the soils, since the site was cleaned up for residential use. However, since the model which was used to define the cleanup standard for lead contamination in soils, the IBUEK model, has changed since the cleanup level was developed (toward more restrictive standards or requiring more stringent cleanups), the cleanup standard will be re-assessed using the current version of the model. Since current land use at the site is commercial, the cleanup standard is protective in the short term. However, if the re-assessment of the cleanup standard shows that the cleanup is no longer protective for residential use, U.S. EPA will attempt to implement proprietary ICs to protect against future residential use.

With regard to the groundwater, ICs are needed to prevent potable use of the groundwater which is impacted by site-related contamination, until the contamination is below health-based levels.

At the request of U.S. EPA, Honeywell performed an IC study, and obtained a title commitment, which assessed which ICs have been implemented at the site, and which of the proprietary controls, such as easements, appeared in the land records maintained by the Recorder of Deeds. This title commitment found that the deed notice which had been recorded by Rex and Rita Alton, the developers of the former Prestolite Battery Site, had been recorded in the Knox County, Indiana land records, and was picked up through the title search. The deed notice, entitled the "Declaration of Restriction on Use of Real Property" seeks to impose the following restrictions on the site:

- There shall be no use of the groundwater underlying the property which might endanger human health through ingestion or dermal contact or endanger the environment. Groundwater may be pumped and used for industrial purposes.

- There shall be no use of, or activity at, the property that may interfere with the work performed or to be performed in implementing the Record of Decision, or any activity which may damage any remedial action component constructed for or installed pursuant to the ROD or otherwise impair the effectiveness of any work to be performed pursuant to the ROD unless prior written approval is obtained from U.S. EPA.
- There shall be no residential use of the property.
- There shall be no excavation, installation, construction, removal or use of any buildings, wells, pipes, roads, ditches, or any other structures at the property except with the express written approval of U.S. EPA.

These restrictions serve the valuable function of notice, but may not be enforceable over time. The title commitment also brought to light several prior-in-time utility easements and other interests in the land which is owned by Mr. Alton's corporation, the 6th Street Development Corporation, which may affect the efficacy of the environmental restrictions. U.S. EPA plans to address these through an IC Plan, if the risk assessment shows that this is necessary

Some of the land previously owned by Mr. Alton/6th Street was subsequently sold to Lowe's Home Centers, Inc., in 2001. The Prospective Purchaser Agreement with U.S. EPA was transferred to Lowe's (for these particular parcels) as well. Also at the request of U.S. EPA, Lowe's provided a copy of its title commitment which was issued in 2001. The Declaration of Restriction which Mr. Alton had recorded also appeared in the Lowe's title commitment.

Similarly, additional land was sold by the 6th Street Development Corporation to Martin & Bayley, Inc., which developed the gas station and Huck's convenience store. The environmental restrictions for the gas station and Huck's convenience store will be addressed in an IC Plan, if necessary.

Depending upon the result of re-assessment of the site cleanup level, the IC study may need to be expanded to include additional parcels which were never owned by the 6th Street Development Corporation, but which were part of the former area of site-related soil contamination. If it is determined that the current cleanup level is inconsistent with residential use, the IC study will be expanded to include these parcels. Additionally after the extent of lead contamination in soil at the auto garage property north of the site has been investigated, and any necessary remedial actions for that defined, ICs will be implemented, as appropriate.

The IC study determined that Knox County does not have any ordinances that prohibit the installation of water wells on the site. However, the groundwater plume also extends off of the former Prestolite Battery parcel. Although the wells which serviced these residences were abandoned during the remedial action, and the residences placed on water supplied by the City of Vincennes, it does not appear that either any governmental or proprietary ICs protect against the future potable use of the groundwater underneath these residences. This merits further study and additional steps through an IC Plan.

Once U.S. EPA determines what ICs will need to be implemented at the Prestolite Battery site, the Agency will develop an IC plan which will also include a map in both paper and Geographical Information System (GIS) format showing the areas where ICs are required. These maps will be made available to the public on EPA's Superfund Data Management System (SDMS) and will serve as an additional IC informational control.

Site Inspection

Darryl Owens, U.S. EPA Remedial Project Manager, U.S. EPA and Tom Burck, Project Manager, IDEM performed a site inspection on June 14 and June 15, 2006. The soil cleanup for the Prestolite Battery site itself has been completed for over 10 years and a new hardware warehouse store and two restaurants have been built on the site. The Agency representatives did observe the second round of lead soil sampling that was being performed on the adjacent auto garage property. The annual sampling for groundwater and surface water and sediments was also being performed during the site visit. Monitoring wells generally appeared to be in good condition. There were several barrels of purge water from previous groundwater sampling events that had inadvertently not been removed from the site. Honeywell's contractor indicated that these barrels would be removed along with the current groundwater sampling event purge water.

A pile of ground-up concrete from the Prestolite Battery buildings still remains on site along with some concrete, asphalt and soil from an adjacent property. The concrete from the Prestolite Battery buildings had been power washed as part of the lead contaminated soil expedited response action. Per the terms of the Prospective Purchaser Agreement with the site developer, the ground up concrete was to stay on site and be used as a base for future development. Because a portion of this material still remains unused on site, the Agency representatives met with the site developer to see what the plan was to spread the remaining material and eliminate the pile. The developer indicated that he would be utilizing the crushed concrete as a base for a development project in the near future. He will also be removing and/or spreading the asphalt and concrete rubble which had been brought onsite. These construction activities will be coordinated with IDEM.

Interviews

No interviews were conducted for this five-year review.

VII. Technical Assessment

The following questions address the protection of human health and the environment by the remedy at the Prestolite Battery site.

Question A: Is the remedy functioning as intended by the decision documents?

The review of documents, ARARs, risk assumptions, and the results of the site inspection indicates that the remedy is functioning as intended by the ROD. The cleanup of the lead and

PCB contaminated soils has been completed and the direct contact threat posed by these soils has been remediated. During site redevelopment, residual soil contamination was found at several locations. These contaminated soils were excavated and taken to an off-site landfill. Additional sampling to determine the extent of lead contamination in soils at the adjacent auto garage is ongoing and any necessary remediation of soils will be performed. The natural attenuation ground water remedy is currently being implemented and monitored through annual monitoring of the groundwater. One of the volatile organic contaminants (PCE) appears to be naturally attenuating and the metals beryllium and antimony do not appear to be of concern at this time. Annual surface water and sediment monitoring of the Northwest Pond and Kelso Creek are being conducted. Due to elevated levels of lead, additional sampling of fish in the Northwest Pond was performed in 2002 and the levels of metal contaminants found in the fish do not pose a risk to the fish or to humans, animals or birds consuming the fish. The ROD-required abandonment of two residential wells was implemented and included the hook up of the in-service residential well to the municipal water system.

Since the groundwater remedy is natural attenuation, which is measured by groundwater monitoring, there is not an active pump and treat groundwater remedy. Operation and maintenance is minimal and consists of periodic maintenance of the monitoring wells and disposal of groundwater purge water from sampling events. Costs of groundwater and also surface water/sediment sampling is consistent and relatively inexpensive compared to an active groundwater pump and treat system. Costs will also be incurred for periodic maintenance of the monitoring wells. The limited groundwater sampling activities do not lend themselves to optimization.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of remedy selection still valid?

There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy.

Changes in Standards and To Be Considereds

As the Prestolite Battery site soil cleanup has been completed, the cleanup levels contained in the Consent Order have been met for the on-site cleanup. The cleanup level will be re-assessed, using the current version lead risk assessment, to affirm that the cleanup remains protective for residential use. Any required soil remediation of the adjacent auto garage property will have to meet an appropriate soil cleanup level given the property's anticipated use, and, if necessary, institutional controls will be implemented.

The following standards were identified as applicable or relevant and appropriate requirements (ARARs) in the 1994 ROD for the site and were reviewed for changes that could affect protectiveness:

- Safe Drinking Water Act Maximum Contaminant Levels (MCLs);
- State of Indiana Water Quality Standards and;
- Federal Ambient Water Quality Criteria for Protection of Aquatic Life.

Standards for the chemicals of concern in the groundwater (trichloroethylene (TCE), tetrachloroethylene (PCE), antimony and beryllium) have not become more stringent since the signing of the groundwater related ROD in 1994. The MCLs remain at 5 micrograms per liter (ug/l) for TCE, 5 ug/l for PCE, 6 ug/l for antimony, and 4 ug/l for beryllium. It should be noted that U.S. EPA is performing a new risk assessment for TCE and PCE on a national basis. When this risk assessment is completed, the site cleanup goals for PCE and TCE, which are the current Safe Drinking Water Act MCLs, will be evaluated to make sure the cleanup goals are protective.

The current state and federal standards for water quality and protection of aquatic life are being used to evaluate surface water and sediment samples in the off-site surface waters. Federal and state standards for surface water quality and protection of aquatic life have not changed since the time of the ROD.

Changes in Exposure Pathways, Toxicity and Other Contaminant Characteristics

As previously discussed, the 2002 fish sampling triggered by elevated levels of lead in surface water and sediment determined that there was no unacceptable risk to fish or humans, animals or birds that might consume the fish. Also, as previously discussed, new risk assessments are being performed by U.S. EPA for TCE and PCE. After these risk assessments have been completed, the current groundwater cleanup levels for TCE and PCE will be evaluated to assure that they remain protective.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

Concentrations of the volatile compounds TCE and PCE in groundwater at the site were reviewed to determine whether they could pose a potential threat via the vapor intrusion pathway into residences north of the site. The review was performed using U.S. EPA's *2002 Draft Guidance for Evaluating the Vapor Intrusion Pathway to Indoor Air from Groundwater and Soils*. Vapor from volatile compounds in groundwater or soils can volatilize and enter into buildings. The review of the site TCE/PCE concentrations found that the concentrations of TCE exceeded the screening level in the guidance. It was determined that two residences could potentially be affected. If the screening levels are exceeded, additional actions need to be taken to determine whether a risk actually exists. Honeywell was notified of the potential risk from the TCE in the groundwater. While PCE concentrations did not exceed the screening levels, PCE will also be sampled for as a further precaution. Honeywell has agreed with the Agencies that it will perform site-specific vapor intrusion modeling and also will perform indoor air sampling or

soil gas sampling at the two residences.

Technical Assessment Summary

According to the data reviewed and the site inspection, the remedy is functioning as intended by the ROD and the Consent Order. The cleanup of the lead and PCB contaminated soils on-site has been completed and the direct contact threat posed by these soils has been remediated. During site redevelopment, residual soil contamination was found at several locations. These contaminated soils were excavated and taken to an off-site landfill. Additional sampling to determine the extent of lead contamination in soils at the adjacent auto garage has been completed and is being evaluated, and any necessary remediation of soils will be performed.

The natural attenuation ground water remedy is currently being implemented and monitored through annual monitoring of the groundwater. One of the volatile organic contaminants (PCE) appears to be naturally attenuating and the metals beryllium and antimony do not appear to be of concern at this time. New risk assessments are being performed by EPA for TCE and PCE. After these risk assessments have been completed, the current groundwater cleanup levels for TCE and PCE will be evaluated to assure that they remain protective. Site specific modeling and either indoor air sampling or soil gas sampling of two residences will be performed to determine if there is any potential risk from volatilization of TCE and PCE from the groundwater.

Annual surface water and sediment monitoring of the Northwest Pond and Kelso Creek are being conducted. Due to elevated levels of lead, additional sampling of fish in the Northwest Pond was performed in 2002 and the levels of metal contaminants found in the fish do not pose a risk to the fish or to humans, animals or birds consuming the fish. The ROD-required abandonment of two residential wells was implemented and included the hook up of the in-service residential well to the municipal water system.

VIII. Issues

The following issues were discovered during the five-year review and also the site inspection and are noted in Table 2.

Table 2: Issues

Issues	Currently Affects Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Potential vapor intrusion of TCE into two residences north of the site	Unknown	Unknown

Issues	Currently Affects Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Lead contamination on adjacent auto garage property	N	Y
Protectiveness of current groundwater cleanup goals for TCE and PCE	N	Y
Protectiveness of soil cleanup	N	Y
Depending on results of assessment of protectiveness of soil cleanup, potential need for IC plan to protect against residential use.	N	Y
IC plan for groundwater and potentially for auto garage Property. Effective ICs must be implemented and maintained for the area which exceeds the groundwater cleanup standards at the Site and possibly the auto garage.	N	Y

Issue not affecting the protectiveness of the remedy

Several barrels of purge water were left on site from the previous groundwater sampling event.

IX. Recommendations and Follow-up Actions

Table 3 : Recommendations and Follow-up Actions

Issue	Recommendations Follow-up Actions	Party Responsible	Oversight Agency	Mile- stone Date	Affects Protectiveness (Y/N)	
					Current	Future
Potential vapor intrusion at 2 Residences	Perform vapor intrusion modeling and soil gas sampling at residences	Honeywell	EPA/IDEM	June 2007	N	Y
Lead soil contamination at auto garage property	Evaluate second round of soil sampling and perform any necessary remediation	Honeywell	EPA/IDEM	September 2007	N	Y
Protectiveness of current groundwater cleanup goals for TCE and PCE	Reevaluate protectiveness after EPA Headquarters completes risk assessment for TCE and PCE	EPA Headquarters	EPA	September 2007	N	Y
Protectiveness of current soil cleanup	Reevaluate protectiveness using current lead model	EPA	EPA	March 2007	N	Y
IC Plan	* See Below	EPA/ Honeywell/ IDEM	EPA	March 2007 **	N	Y

*An IC Plan will be prepared which includes a provision for 1) an IC study to determine if ICs are necessary on the Prestolite Site and to assure that effective groundwater ICs exist off the site until the groundwater meets the cleanup standards; 2) implementing corrective measures, if necessary; 3) developing IC maps and 4) ensuring that effective procedures are in place to ensure long-term stewardship including regular inspection of ICs at the site and annual certification to EPA that ICs are in place and other measures, as necessary.

** IC Plan will be completed by March 2007 assuming that prior to that time, the evaluation of site soil cleanup standards is complete, the extent of any soil cleanup at the auto garage has been determined, and that the extent of any vapor intrusion has also been determined.

Recommendations/Follow-up actions not affecting the protectiveness of the remedy

Honeywell will dispose of the barrels of purge water from the previous sampling event along with the purge water from the current event by October 2006.

X. Protectiveness Statements

A protectiveness determination of the remedy cannot be made at this time until further information is obtained. Further information will be obtained by taking the following actions:

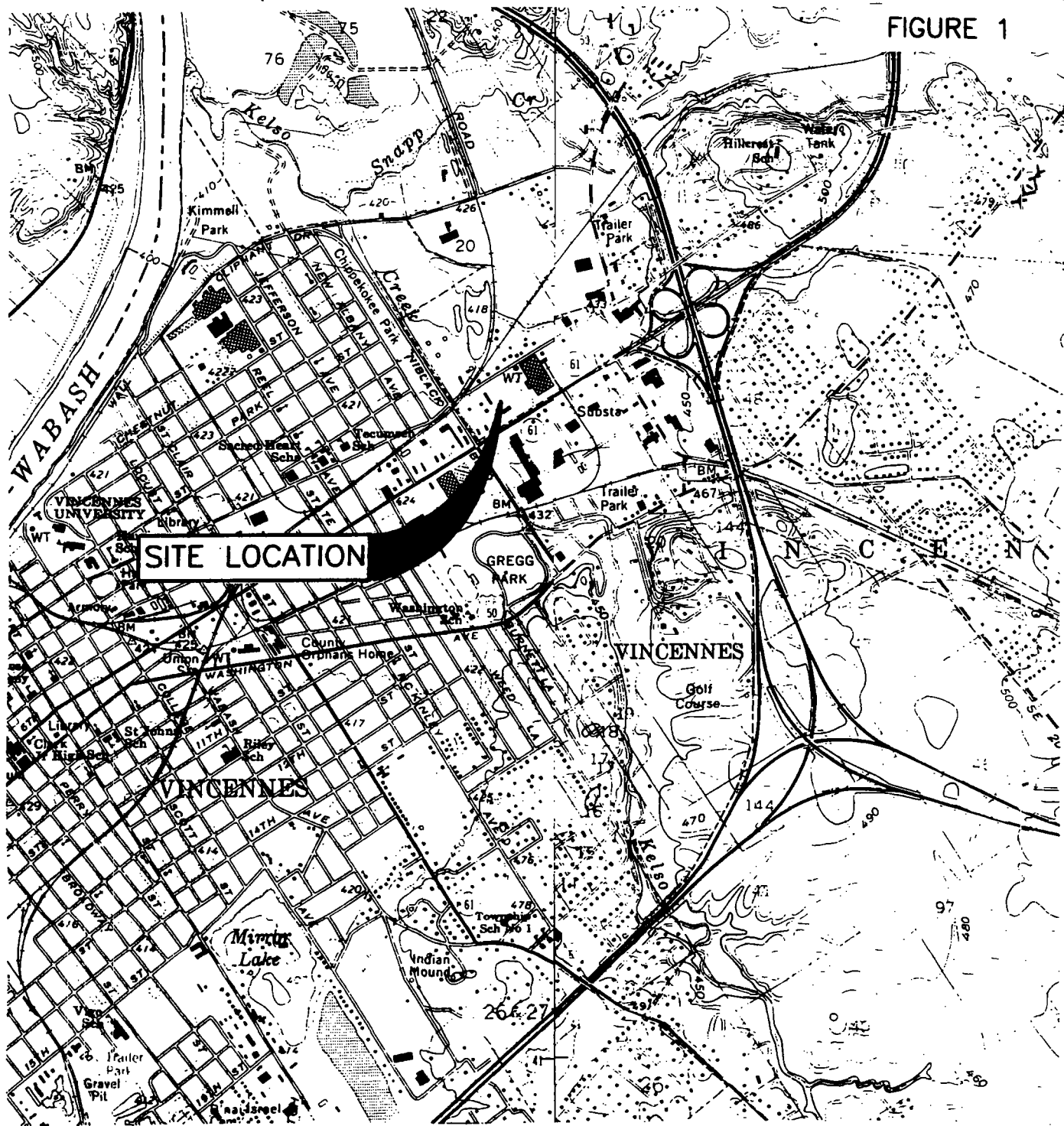
- 1) Perform vapor intrusion modeling and indoor air or soil gas sampling for two residences north of the site; and
- 2) Evaluate the second round of lead soil sampling at the adjacent auto garage property and perform any necessary soil remediation; and
- 3.) Review the protectiveness of current groundwater cleanup goals after EPA Headquarters completes the TCE and PCE risk assessment; and
- 4.) Review the protectiveness of the soil cleanup using the current lead risk assessment model; and
- 5.) Develop an IC Plan to implement ICs, as necessary, based on the reassessment of the soil cleanup and the results of lead sampling at the auto garage property. An IC Plan will also be developed with regard to parcels impacted by site groundwater.

It is expected that these actions will take approximately one year to complete, at which time a protectiveness statement will be made.

XI. Next Review

The next five year review for the Prestolite Battery site is required by September 2011, five years from the date of this review.

FIGURE 1



FRITCHTON & VINCENNES QUADRANGLE

FORMER PRESTOLITE SITE
ALLIED SIGNAL VINCENNES, IN

SITE TOPOGRAPHIC LOCATION MAP



STATE LOCATION MAP

1163.111.03

11/7/98

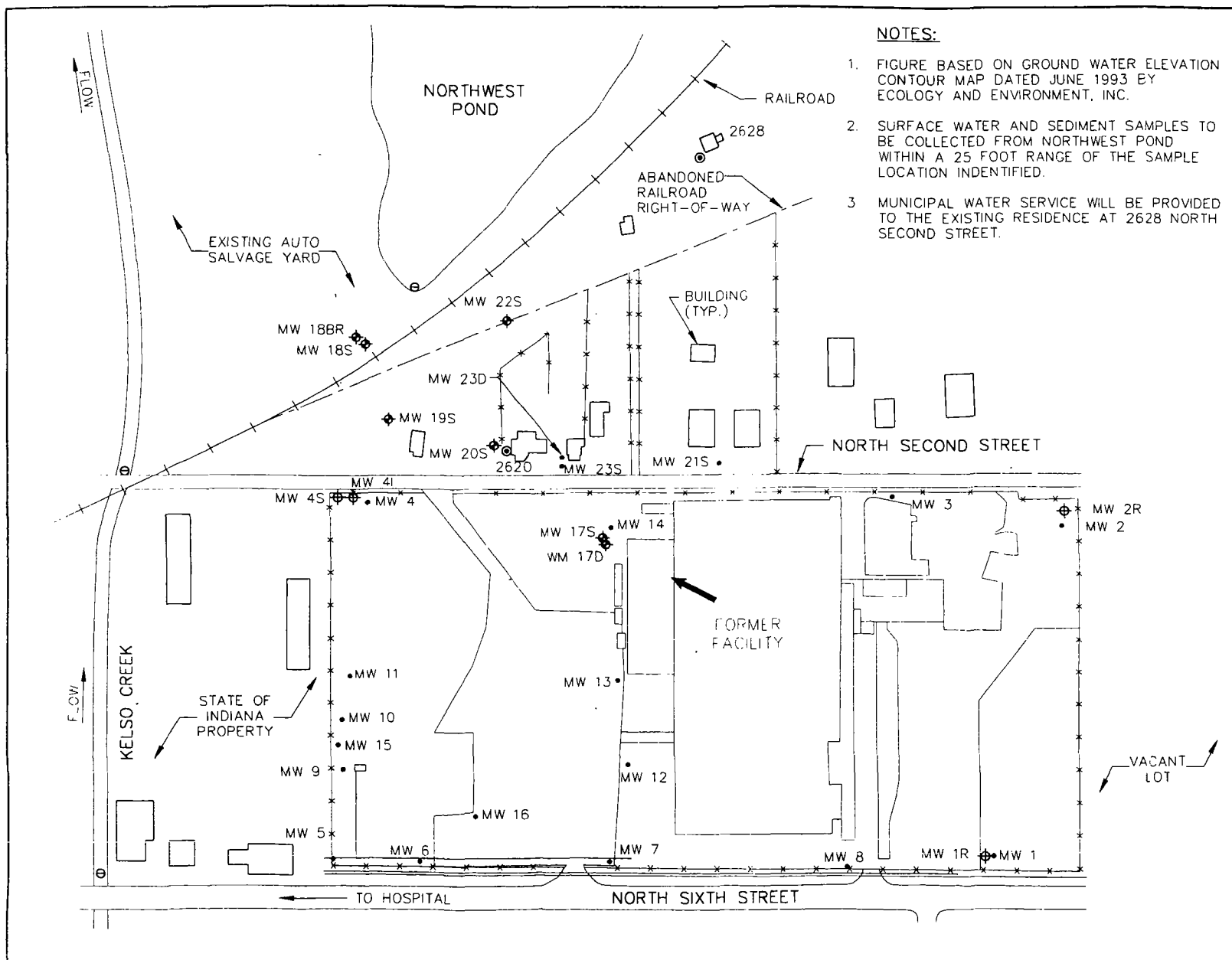


FIGURE 2

ALLIED SIGNAL, INC.
MORRISTOWN, NEW JERSEY
FORMER PRESTOLITE
BATTERY SITE
VINCENNES, INDIANA
WORK PLAN

4/21/98
1153111-01F

Attachment 2
Prestolite Battery Site
Five-Year Review
Documents Reviewed

Record of Decision, U.S. EPA, August 23 1994

Data Documentation Reports, Former Prestolite Battery Site, Vincennes, IN, prepared by O'Brien & Gere Engineers, Inc (2001-2004)

Draft Annual Sampling Report, Former Prestolite Battery Site, Vincennes, IN, prepared by CH2M Hill, January 2006

Results of the Sampling and Analysis of Biological Tissues From the Northwest Pond, Former Prestolite Battery Site, Vincennes, IN, prepared by O'Brien & Gere Engineers, Inc., March 2003

Letter Addendum to the Results of the Sampling and Analysis of Biological Tissues From the Northwest Pond, prepared by CH2M Hill, February 27, 2006

The Site Investigation and Closure Report Addendum of Approximately 14 Acres Located Along 6th Street in Vincennes, IN., a Portion of the Former Prestolite Battery Site, Prepared by Environmental Management Consultants Inc., February 2005

Former Prestolite Battery Site, Vincennes, Indiana, Huffer's Garage Sampling Plan, prepared by O'Brien & Gere Engineers, Inc., May 2005

November 11, 2005 letter summarizing sampling results for lead in soil at the Huffer's Garage, prepared by O'Brien & Gere Engineers, Inc.

Sampling and Analysis Plan for Huffer's Garage, Former Prestolite Battery Site, Vincennes, IN., prepared by CH2M Hill, April 2006

Draft Institutional Controls Investigation Study, Former Prestolite Battery Site, Vincennes, IN., prepared by CH2M Hill, May 2006

Clubs

Continued from B1
 guest, Beulah Anderson, were present.

A poetry reading was given by Clark entitled "E-A-S-T-E-R" written by Pastor Lonnie Goen.

A health and safety lesson "Understanding Trans Fat" was presented by Spencer.

Members unanimously voted to donate to the Shae Hulen Building Project in Bicknell.

Club treasurer Reba Spanger volunteered to take Shae and her mother shopping with the funds to decorate her new bedroom in the handicap accessible home currently under construction by volunteers.

Donations of peanut butter and jelly were collected from members for the North Knox Social Ministries food pantry.

Vice-president Suzan Morgan

presented a video lesson on "Identity Theft", followed by a short test to assess each member's personal vulnerability to identity theft.

Verlene Dinkins won the door prize and Judith Woodruff won the birthday auction gift.

The next meeting will be May 18 at Asbury Chapel Church in Ragsdale with Woodruff as hostess and Buck as co-hostess.

Prestolite Battery Site Under EPA Review Vincennes, Indiana

EPA is conducting a five-year review of the Prestolite Battery site in Vincennes, Ind., to ensure past cleanup efforts continue to protect human health and the environment. The report is due early September 2006 and citizens who wish to comment are asked to do so by Aug. 1.

Primary contaminants lead and PCB-laden soil were removed by excavation and various institutional and engineering controls were applied to the 17½-acre site to reduce human exposure. Ground water (underground water supplies) concerns were also addressed. An earlier five-year review found the cleanup functioning as designed.

More complete information on the cleanup can be found at the Knox County Public Library, 502 N. Seventh St., Vincennes.

For questions or comments contact:

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owens.darryl@epa.gov



Happy Nurses Week

from Vincennes Surgery Center! Thank you to
 our dedicated and caring nursing staff!

Renee Brasseur • Lesa Edoin